

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX011022\  
 Data File : VX026410.D  
 Acq On : 10 Jan 2022 18:16  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

Quant Time: Jan 11 04:57:26 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X011022W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Mon Jan 10 12:50:55 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000 | 0.0   | 89    | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 1.807 | 1.833 | -1.4  | 75    | 0.00     |
| 3 M  | Chloromethane               | 1.579 | 1.538 | 2.6   | 75    | 0.00     |
| 4 M  | Vinyl Chloride              | 1.745 | 1.653 | 5.3   | 74    | 0.00     |
| 5 M  | Bromomethane                | 0.786 | 0.578 | 26.5# | 56    | 0.00     |
| 6 M  | Chloroethane                | 0.990 | 1.063 | -7.4  | 81    | 0.00     |
| 7 M  | Trichlorofluoromethane      | 2.766 | 2.685 | 2.9   | 75    | 0.00     |
| 8 T  | Diethyl Ether               | 0.987 | 0.977 | 1.0   | 79    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 1.726 | 1.667 | 3.4   | 75    | 0.00     |
| 10 M | 1,1-Dichloroethene          | 1.613 | 1.606 | 0.4   | 79    | 0.00     |
| 11   | Methyl Iodide               | 1.751 | 0.973 | 44.4# | 48#   | 0.00     |
| 12   | Methyl Acetate              | 3.378 | 3.274 | 3.1   | 77    | 0.00     |
| 13 M | Acrolein                    | 0.350 | 0.208 | 40.6# | 59    | 0.00     |
| 14 M | Acrylonitrile               | 0.942 | 0.909 | 3.5   | 77    | 0.00     |
| 15 M | Acetone                     | 0.296 | 0.287 | 3.0   | 71    | 0.00     |
| 16 M | Carbon Disulfide            | 4.554 | 4.286 | 5.9   | 76    | 0.00     |
| 17   | Allyl chloride              | 3.104 | 2.848 | 8.2   | 75    | 0.00     |
| 18 M | Methylene Chloride          | 1.776 | 1.746 | 1.7   | 78    | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 1.733 | 1.659 | 4.3   | 77    | 0.00     |
| 20 T | Diisopropyl ether           | 6.032 | 5.876 | 2.6   | 76    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 3.321 | 3.202 | 3.6   | 76    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 2.028 | 1.957 | 3.5   | 78    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.342 | 0.306 | 10.5  | 77    | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 5.997 | 5.699 | 5.0   | 75    | 0.00     |
| 25 M | Chloroform                  | 3.441 | 3.397 | 1.3   | 78    | 0.00     |
| 26   | Cyclohexane                 | 3.038 | 2.958 | 2.6   | 76    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.412 | 2.480 | -2.8  | 89    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 89    | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.463 | 0.442 | 4.5   | 78    | 0.00     |
| 30 M | 2-Butanone                  | 0.269 | 0.246 | 8.6   | 72    | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.480 | 0.397 | 17.3  | 69    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.564 | 0.523 | 7.3   | 76    | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.500 | 0.456 | 8.8   | 74    | 0.00     |
| 34 M | Benzene                     | 1.285 | 1.215 | 5.4   | 77    | 0.00     |
| 35   | Methacrylonitrile           | 0.282 | 0.267 | 5.3   | 77    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.519 | 0.488 | 6.0   | 77    | 0.00     |
| 37 M | Trichloroethene             | 0.371 | 0.342 | 7.8   | 75    | 0.00     |
| 38   | Methylcyclohexane           | 0.555 | 0.529 | 4.7   | 76    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.329 | 0.311 | 5.5   | 76    | 0.00     |
| 40   | Dibromomethane              | 0.231 | 0.221 | 4.3   | 78    | 0.00     |
| 41 M | Bromodichloromethane        | 0.476 | 0.436 | 8.4   | 74    | 0.00     |
| 42 M | Vinyl Acetate               | 0.834 | 0.781 | 6.4   | 76    | 0.00     |
| 43   | Ethyl Acetate               | 0.489 | 0.455 | 7.0   | 76    | 0.00     |
| 44   | Isopropyl Acetate           | 0.808 | 0.751 | 7.1   | 76    | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.006 | 0.006 | 0.0   | 74    | 0.00     |
| 46   | Methyl methacrylate         | 0.396 | 0.371 | 6.3   | 76    | 0.00     |
| 47   | n-amyl Acetate              | 0.604 | 0.545 | 9.8   | 73    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.476 | 0.402 | 15.5  | 70    | 0.00     |

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 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
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 QLast Update : Mon Jan 10 12:50:55 2022  
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 25% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|-------|-------|-------|----------|
| 49 T | cis-1,3-Dichloropropene     | 0.526 | 0.463 | 12.0  | 73    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.317 | 0.305 | 3.8   | 77    | 0.00     |
| 51   | Ethyl methacrylate          | 0.506 | 0.474 | 6.3   | 76    | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.550 | 0.527 | 4.2   | 77    | 0.00     |
| 53 M | Dibromochloromethane        | 0.345 | 0.313 | 9.3   | 73    | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.337 | 0.310 | 8.0   | 75    | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.271 | 0.293 | -8.1  | 93    | 0.00     |
| 56 M | Bromoform                   | 0.229 | 0.197 | 14.0  | 72    | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0   | 89    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.560 | 0.550 | 1.8   | 77    | 0.00     |
| 59 M | 2-Hexanone                  | 0.433 | 0.411 | 5.1   | 72    | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.501 | 0.496 | 1.0   | 89    | 0.00     |
| 61 M | Tetrachloroethene           | 0.442 | 0.426 | 3.6   | 76    | 0.00     |
| 62 M | Toluene                     | 1.602 | 1.538 | 4.0   | 77    | 0.00     |
| 63 S | Toluene-d8                  | 1.378 | 1.378 | 0.0   | 89    | 0.00     |
| 64 M | Chlorobenzene               | 0.972 | 0.909 | 6.5   | 75    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.370 | 0.345 | 6.8   | 75    | 0.00     |
| 66 M | Ethyl Benzene               | 1.792 | 1.694 | 5.5   | 76    | 0.00     |
| 67 M | m/p-Xylenes                 | 0.666 | 0.633 | 5.0   | 76    | 0.00     |
| 68 M | o-Xylene                    | 0.646 | 0.614 | 5.0   | 75    | 0.00     |
| 69 M | Styrene                     | 1.073 | 1.015 | 5.4   | 77    | 0.00     |
| 70   | Isopropylbenzene            | 1.733 | 1.673 | 3.5   | 76    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.472 | 0.455 | 3.6   | 79    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.479 | 0.451 | 5.8   | 75    | 0.00     |
| 73   | Bromobenzene                | 0.397 | 0.374 | 5.8   | 75    | 0.00     |
| 74   | n-propylbenzene             | 2.001 | 1.913 | 4.4   | 77    | 0.00     |
| 75   | 2-Chlorotoluene             | 1.202 | 1.147 | 4.6   | 76    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.447 | 1.396 | 3.5   | 77    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.144 | 0.097 | 32.6# | 59    | 0.00     |
| 78   | 4-Chlorotoluene             | 1.371 | 1.311 | 4.4   | 77    | 0.00     |
| 79   | tert-butylbenzene           | 1.340 | 1.282 | 4.3   | 76    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.429 | 1.378 | 3.6   | 76    | 0.00     |
| 81   | sec-Butylbenzene            | 1.755 | 1.677 | 4.4   | 76    | 0.00     |
| 82   | p-Isopropyltoluene          | 1.482 | 1.406 | 5.1   | 76    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.738 | 0.685 | 7.2   | 76    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.740 | 0.690 | 6.8   | 76    | 0.00     |
| 85   | n-Butylbenzene              | 1.283 | 1.196 | 6.8   | 76    | 0.00     |
| 86 T | Hexachloroethane            | 0.224 | 0.181 | 19.2  | 67    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.709 | 0.683 | 3.7   | 78    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.120 | 0.106 | 11.7  | 73    | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.464 | 0.406 | 12.5  | 74    | 0.00     |
| 90   | Hexachlorobutadiene         | 0.203 | 0.182 | 10.3  | 74    | 0.00     |
| 91 M | Naphthalene                 | 1.605 | 1.462 | 8.9   | 76    | 0.00     |
| 92   | 1,2,3-Trichlorobenzene      | 0.462 | 0.424 | 8.2   | 76    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0